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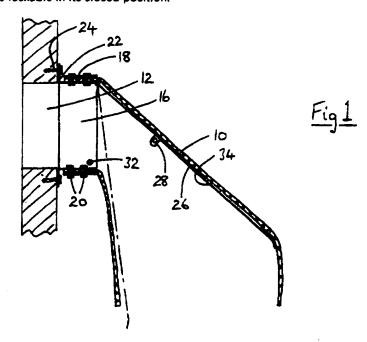
Allan Mackenzie 54 Smallwood, Sutton Hill, TELFORD, TF7 4HL, **United Kingdom** 

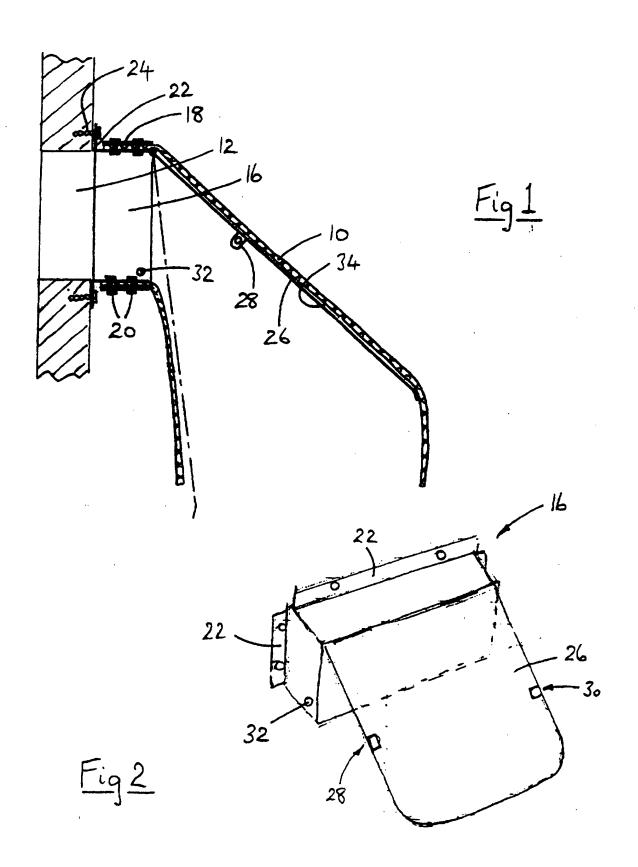
- (72) Inventor(s)
  - Allan Mackenzie
- (74) Agent and/or Address for Service Barker Brettell 138 Hagley Road, Edgbaston, BIRMINGHAM, B16 9PW, United Kingdom

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#### (54) Abstract Title Mail collector

(57) A mail collector eg for use with an aperture (12) such as a letterbox, comprises a sack (10) to contain mail received through the aperture (12), and means (16,18,20,22,24) to secure the sack (10) adjacent the aperture (12). The entry portion of the sack (10) is held open, and a stiff deflecting panel (26) is arranged opposite the aperture (12) within the sack (10). The panel (26) serves to deflect posted mail from a portion (34) of the sack (10) facing the aperture (12), thereby reducing wear on that portion (34) of the sack (10). The stiff deflecting pan 1 (26), which may pivot, may be secured to the inside of the sack (10), or to the securing means (16,18,20). The panel (26) may be lockable in its closed position.





### MAIL COLLECTOR

This invention is concerned with improvements in or relating to apparatus suitable for use in association with an aperture (commonly referred to as a letterbox) in a door or other panel, to contain mail which becomes posted through the aperture, such apparatus being referred to herein as a mail collector.

It is quite usual, in domestic circumstances at least, for a letterbox 10 in a door to have no mail collector of any kind associated with it. As a consequence, mail posted through the door falls to the floor, to the inside There are many disadvantages arising from this. It is of the door. necessary to stoop to pick up the mail, which for the elderly or handicapped can present difficulties. The mail is exposed to damage, whether from pets or otherwise. If there is a view of the floor area from outside the property, a security risk can arise from a build-up of mail being visible should it not be retrieved regularly during, for example, holiday periods.

20 It is known for collecting boxes and wire cages to be used as mail collectors, the box or cage being secured to the door and usually having a pivoting flap which permits access for emptying. However, a rigid box or cage needs to be very deep (in the direction in which mail enters it through the letterbox) if long items such as newspapers, large envelopes 25 and tubular document containers are not to be obstructed as they are Most mail collectors suitable for domestic use are not introduced. sufficiently deep to avoid this problem, not least because such a large box or cage would present a substantial and unsightly obstruction behind the door.

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It is an object of the present invention to provide a mail collector which generally overcomes the disadvantages referred to of known collectors and can be made wholly suitable for domestic use.

In one of its aspects the invention provides a mail collector suitable for use in association with an aperture in a door or other panel to contain mail which is posted through the aperture into the collector, the collector comprising a sack and holding means arranged to be secured adjacent to the aperture to retain the sack with an entry portion of the sack held open to receive mail posted through the aperture, there being a stiff deflecting panel arranged opposite the aperture within the sack to deflect posted mail from a portion of the sack facing the aperture, whereby to protect said portion of the sack from wear.

The deflecting panel, which may be, for example, of stiff plastics or sheet metal, may be secured (by bonding or otherwise) to the inside of the sack or it may be secured to the holding means. Secured to the holding means, the deflecting means may be in the form of a pivoting flap which is free to swing away from the aperture as mail is posted through. The holding means may comprise locking means enabling the flap to be secured in a closed position in which it prevents mail or other articles being posted through the aperture into the sack. Such locking means can be automatic, for example on a timer, to maintain the collector closed except at normal mail delivery times, which can be advantageous for security purposes.

There now follows a description, to be read with reference to the accompanying drawings, of a mail collector which illustrates the invention by way of example.

In the accompanying drawings:

Figure 1 is a side sectional view of the mail collector fitted to a door; and

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Figure 2 is a perspective view of an inner frame and flap of sackholding means of the collector.

As illustrated by Figure 1, a mail collector suitable for domestic use comprises a flexible collecting sack 10 secured to receive mail posted through a letterbox 12 in a door 14.

The sack is secured utilising holding means comprising an inner sheet metal frame 16 (Figure 2) and an outer sheet metal frame 18, the two box-like frames being rectangular and respectively of smaller and larger cross-section so that one can fit over the other. An entry portion (the "mouth") of the sack is sandwiched between the two frames and fastenings 20 inserted through the sandwich assembly in order to secure the sack. Each frame may be of mild steel.

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The inner frame 16 (Figure 2) comprises flanges 22 extending along its periphery which enable it to be secured by screws 24 to inner surfaces of the door 14 surrounding the letterbox. When secured to the door, the holding means holds the mouth of the sack open to receive into the sack mail posted through the letterbox, the cross-section of the holding means being similar to (preferably a little larger than) that of the letterbox in the door.

The collector comprises also a stiff, sheet metal, deflecting flap 26 which is pivotally secured to the inner frame 16 along a top edge of the

frame. The flap is of similar width to that of the inner frame but its length (in the direction away from the pivot axis) is substantially longer than the vertical height of the frame. In a closed position, therefore, as indicated in broken line in Figure 1, the flap wholly covers the entry passage provided through the inner frame and prevents mail or other articles being posted into the sack. By means of apertured lugs 28, 30 on the flap, the flap can be locked in a fully closed position by means of locking pins (not shown) inserted into the lugs through apertures 32 in the inner and outer frames. The flap may be of aluminium, for lightness.

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Mail posted through the letterbox 12 becomes pushed against the deflecting flap 26 arranged opposite. So long is the flap is not locked, the flap becomes swung away to allow the mail to drop into the sack 10. The flap protects from wear an inner surface 34 of the sack facing the letterbox, especially when long objects such as newspapers are posted in. The flap is sufficiently long to deflect items into the sack (rather than have them bear against the inner surface 34) even when long items deflect it to a substantial degree.

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The sack is of a tough but flexible flame-proof material, which provides a safeguard should incendiary material be posted through the letterbox. For removal of mail from the sack, the sack has a slit in it (towards its bottom end) closeable by means of a zip fastener which may be secured by means of a padlock. The sack material is also substantially draught-proof which enables the collector to serve as an effective draught excluder.

## **CLAIMS**

- 1. A mail collector suitable for use in association with an aperture in a door or other panel to contain mail which is posted through the aperture into the collector, the collector comprising a sack and holding means arranged to be secured adjacent to the aperture to retain the sack with an entry portion of the sack held open to receive mail posted through the aperture, there being a stiff deflecting panel arranged opposite the aperture within the sack to deflect posted mail from a portion of the sack facing the aperture, whereby to protect said portion of the sack from wear.
- 2. A mail collector according to claim 1 in which the deflecting panel is secured to the inside of the sack.

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- 3. A mail collector according to claim 1 in which the deflecting panel is secured to the holding means.
- 4. A mail collector according to claim 3 in which the deflecting panel is in the form of a pivoting flap which is free to swing away from the aperture as mail is posted through.
- 5. A mail collector according to claim 4 in which the holding means comprises locking means enabling the flap to be secured in a closed position in which it prevents mail or other articles being posted through the aperture into the sack.
  - 6. A mail collector substantially as hereinbefore described with reference to the accompanying drawings.





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Claims searched:

Examiner:

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Patents Act 1977
Search Report under Section 17

# Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.P): E2X: X10

Int Cl (Ed.6): A47G

Other: Online: WPI

## Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
A	GB2271385 A	Harden	
A	GB447868 A	Taylor	
X	US4069965	Maddox, Jr. (See esp. Panel 38)	1,3&4

Document indicating lack of novelty or inventive step
 Document indicating lack of inventive step if combined
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A Document indicating technological background and/or state of the art.

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